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(71) Applicant (for all designated States except US): **KONINKLIJKE PHILIPS ELECTRONICS N.V.** [NL/NL];
Groenewoudseweg 1, NL-5621 BA Eindhoven (NL).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **VOSSEN, Francis-**
cus, J. [NL/NL]; c/o Prof. Holstlaan 6, NL-5656 AA Eindh-
hoven (NL). **LOS, Remco** [NL/NL]; c/o Prof. Holstlaan

6, NL-5656 AA Eindhoven (NL). **SEMPEL, Adrianus**
[NL/NL]; c/o Prof. Holstlaan 6, NL-5656 AA Eindhoven
(NL).

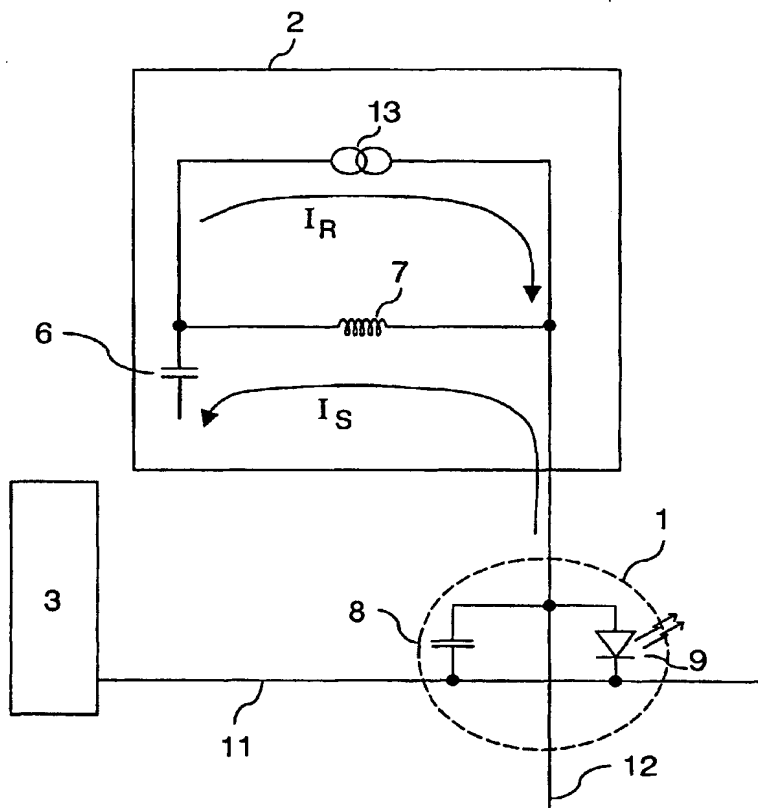
(74) Agent: **DEGUELLE, Wilhelmus, H., G.**; Philips Intel-
lectual Property & Standards, Prof. Holstlaan 6, NL-5656
AA Eindhoven (NL).

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(54) Title: **MATRIX DISPLAY DEVICE WITH ENERGY RECOVERY CIRCUIT**



(57) Abstract: Matrix display device having row electrodes (11) and column electrodes (12) an intersection of a row and a column electrode defining a pixel cell (1) having a pixel cell capacitance (8), and drive circuits (2,3). Blind energy used for charging the pixel cell capacitances (8) when driving the pixel cells (1) is not dissipated but stored into a buffer capacitor (6) through an inductor (7) forming a series inductor-capacitor circuit and subsequently recovered by discharging the buffer capacitor (6) into the pixel cell capacitances (8) through a current source (13). Energy recovery is thus current driven, which allows to control the light reflected or emitted by the pixel cell (1) in a manner which is less dependent on temperature variations and/or ageing of the device.

WO 2004/025609 A3



ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

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A. CLASSIFICATION OF SUBJECT MATTER

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B. FIELDS SEARCHED

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Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2001/030633 A1 (VAN VELZEN JEROEN) 18 October 2001 (2001-10-18) paragraphs '0005!-'0007!,'0021!; figures 1,2	1,6,7
X	US 6 404 012 B1 (TAKAHASHI KENICHIRO) 11 June 2002 (2002-06-11) column 21, line 1 -column 23, line 32; figure 12	1,5,7
A	US 2002/036605 A1 (KAWASHIMA SHINGO) 28 March 2002 (2002-03-28) abstract; figure 2	1,7
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Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax: (+31-70) 340-3016

Authorized officer

Amian, D

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	"ENERGY RECOVERY METHOD FOR A LIQUID CRYSTAL DISPLAY SOURCE DRIVER" IBM TECHNICAL DISCLOSURE BULLETIN, IBM CORP. NEW YORK, US, vol. 40, no. 8, 1 August 1997 (1997-08-01), pages 191-192, XP000735627 ISSN: 0018-8689 the whole document -----	1,7

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